

A1
3. (Amended) The method according to claim 1, wherein the non-single crystalline silicon film comprises an amorphous silicon film [the metal element is an interstitial element]. *Amended 1*

4. (Amended) The method according to claim [1] 2, wherein the non-single crystalline silicon film comprises an amorphous silicon film [a concentration of the metal element in the film is 1×10^{15} atoms cm^{-3} to 5×10^{19} atoms cm^{-3}].

to cancel

6. (Amended) A method of manufacturing a semiconductor device, comprising the steps of:

A2
Sul D2
now
selectively introducing a metal element for promoting [accelerating] crystallization of silicon into an amorphous silicon film by solution application; *Id claim 11/7*

irradiating the amorphous silicon film with laser light [or strong light,] to produce a crystalline silicon film from the amorphous silicon film using the metal element; and

subjecting the crystalline silicon film to a heat treatment.

7-9 unchanged - Dep. on 6

A3
Sul D3
10. (Amended) The method according to claim 6, wherein the irradiating step is performed [in a state that] while the crystalline silicon film is heated to 450 to 600°C.

11. (Amended) A manufacturing method of a semiconductor device, comprising the steps of:

[in a state that] disposing a catalyst element [for accelerating] or a compound including the catalyst element in contact with an amorphous

see 14 ~ 17

silicon film by solution application, wherein said catalyst element or compound including the catalyst element promotes crystallization of [an] the amorphous silicon film [or a compound thereof is held in contact with the amorphous silicon film],

[imparting crystallinity to] crystallizing the amorphous silicon film using the catalyst element or compound including the catalyst element by irradiating it with laser light [or strong light]; and

subjecting [a crystallinity-imparted] crystallized silicon film to a heat treatment.

14 strike

14. (Amended) A manufacturing method of a semiconductor device, comprising the steps of:

applying, to an amorphous silicon film, a solution in which a catalyst element for promoting [accelerating] crystallization of the amorphous silicon film is dissolved or dispersed; [and]

[improving] increasing crystallinity of the silicon film using the catalyst element by irradiating the silicon film [it] with laser light [or strong light]; and

heating the silicon film in which the crystallinity has been increased.

(14) canceled

17. (Amended) A manufacturing method of a semiconductor device, comprising the steps of:

applying, to an amorphous silicon film, a polar solvent in which a compound of a catalyst element for promoting [accelerating] crystallization of the amorphous silicon film is dissolved or dispersed;

[imparting crystallinity to] crystallizing the silicon film using the catalyst element by irradiating it with laser light [or strong light]; and

Sub 25
AS

subjecting [a crystallinity-imparted] crystallized silicon film to a heat treatment.

18. (Amended) The method according to claim 17, wherein the solution includes one or a plurality of polar solvents selected from the group consisting of water, alcohol, acid and ammonia [water].

19-20 withdrawn

21. (Amended) A method of manufacturing a semiconductor device, comprising the steps of:

A6
See 14 & 17

[the first step of] introducing a metal element for promoting [accelerating] crystallization of silicon into an amorphous silicon film by solution application;

[the second step of] irradiating the amorphous silicon film with laser light to crystallize it using the metal element [or strong light];

Sub D6

[the third step of] subjecting the crystallized silicon film to a heat treatment; and

repeating the second and third steps two or more times in total.

22. (Amended) A method of manufacturing a plurality of thin-film transistors on a substrate having an insulative surface, comprising the steps of:

forming an amorphous silicon film on the substrate having the insulative surface;

selectively introducing a metal element for promoting [accelerating] crystallization of silicon into the amorphous silicon film by solution application so that the metal element is brought in contact with a surface of the amorphous silicon film; [and]